

# EFARFISA

Original

# Transivox

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SCHEMATIC DIAGRAMS

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**BLOCK DIAGRAM**

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graph LR
    AFX[A/FX] --> PF1[PERC. FILTERS]
    PF1 --> PM1[PERC. MODULATOR]
    PM1 --> P1[PREAMP]
    P1 --> P2[PREAMP]
    P2 --> OUT[OUT]
    P2 --> SWP[SWELL PEDAL]
    P2 --> AV1[PREAMP & VOLUME]
    AV1 --> OUT
    AV1 --> AV2[PREAMP]
    AV2 --> OUT
    G[GENERATOR] --> GT[GATES TREBLE]
    V[VIBRATO] --> GT
    GT --> B[BUFFERS]
    B --> OF[ORCHESTRA FILTERS]
    OF --> PM1
    GT --> FF[FLUTE FILTERS]
    FF --> PM1
    GT --> P2
    TK[TREBLE KEYSWITCHES] --> PD[PERC. DRIVER]
    PD --> PM1
    TK --> P2
    BCG[BASS & CHORD GATES] --> P3[PREAMP & VOLUME]
    P3 --> BCF[BASS & CHORD FILTER]
    BCF --> P4[PREAMP]
    P4 --> OUT
    P4 --> AV2
    BCK[BASS & CHORD KEYSWITCHES] --> BD[BRUSH DRIVER]
    BD --> BFFV[BRUSH FILTER & VOLUME]
    BFFV --> BM[BRUSH MODULATOR]
    BM --> P4
    BM --> P5[PREAMP]
    P5 --> OUT
    P5 --> AV2
    M[MIKE] --> AV1
    SP[SWELL PEDAL] --> OUT
  
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**NOTES:**

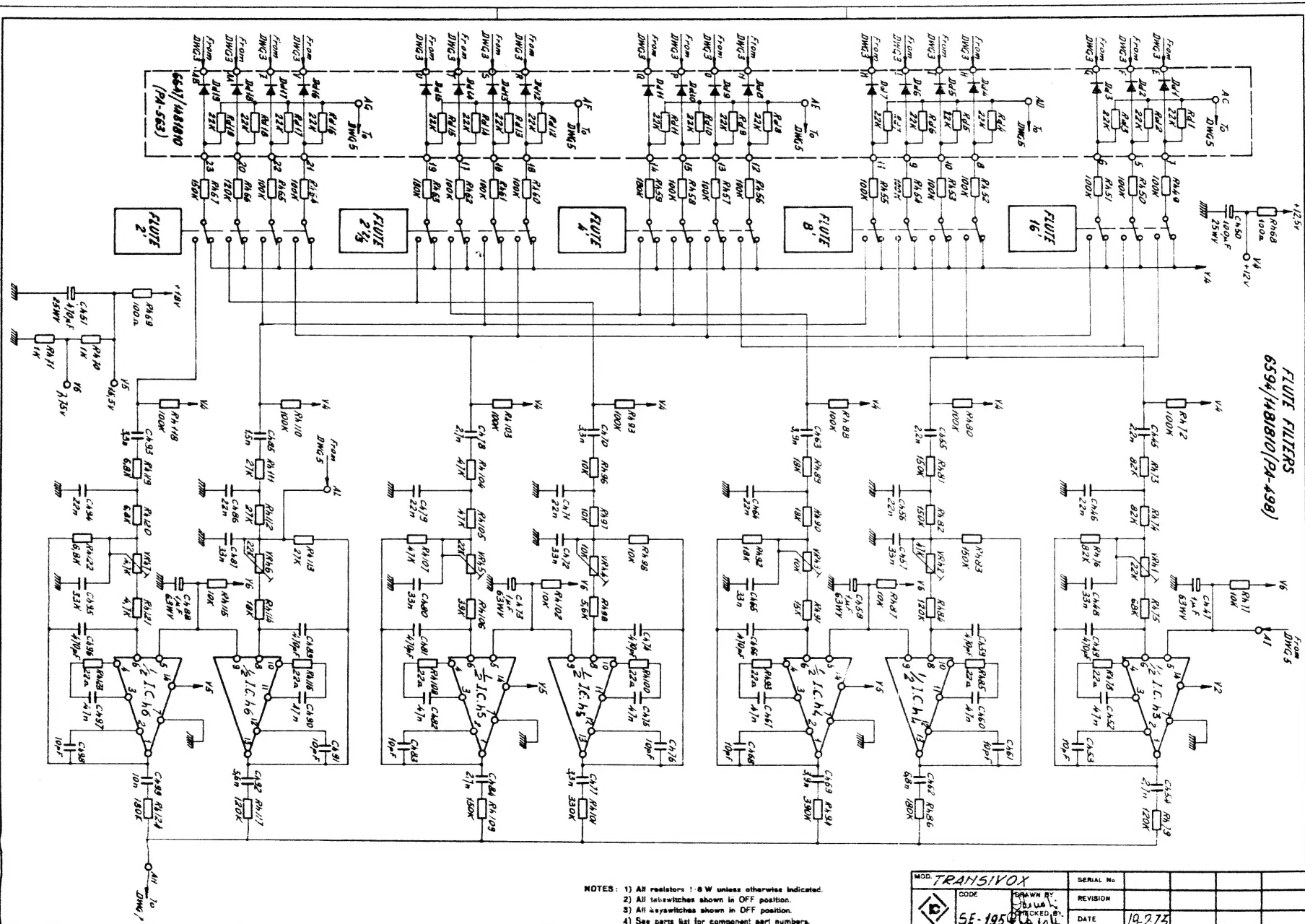
- 1) All resistors 1/8 W unless otherwise indicated.
- 2) All tabswitches shown in OFF position.
- 3) All keyswitches shown in OFF position.
- 4) See parts list for component part numbers.

<b>TRANSVOX</b>		SERIAL No					
CODE	DRAWN BY	REVISION					
SE-195	J. H. B. 10/1/64	DATE	19-27				

DWG 1 OF 7

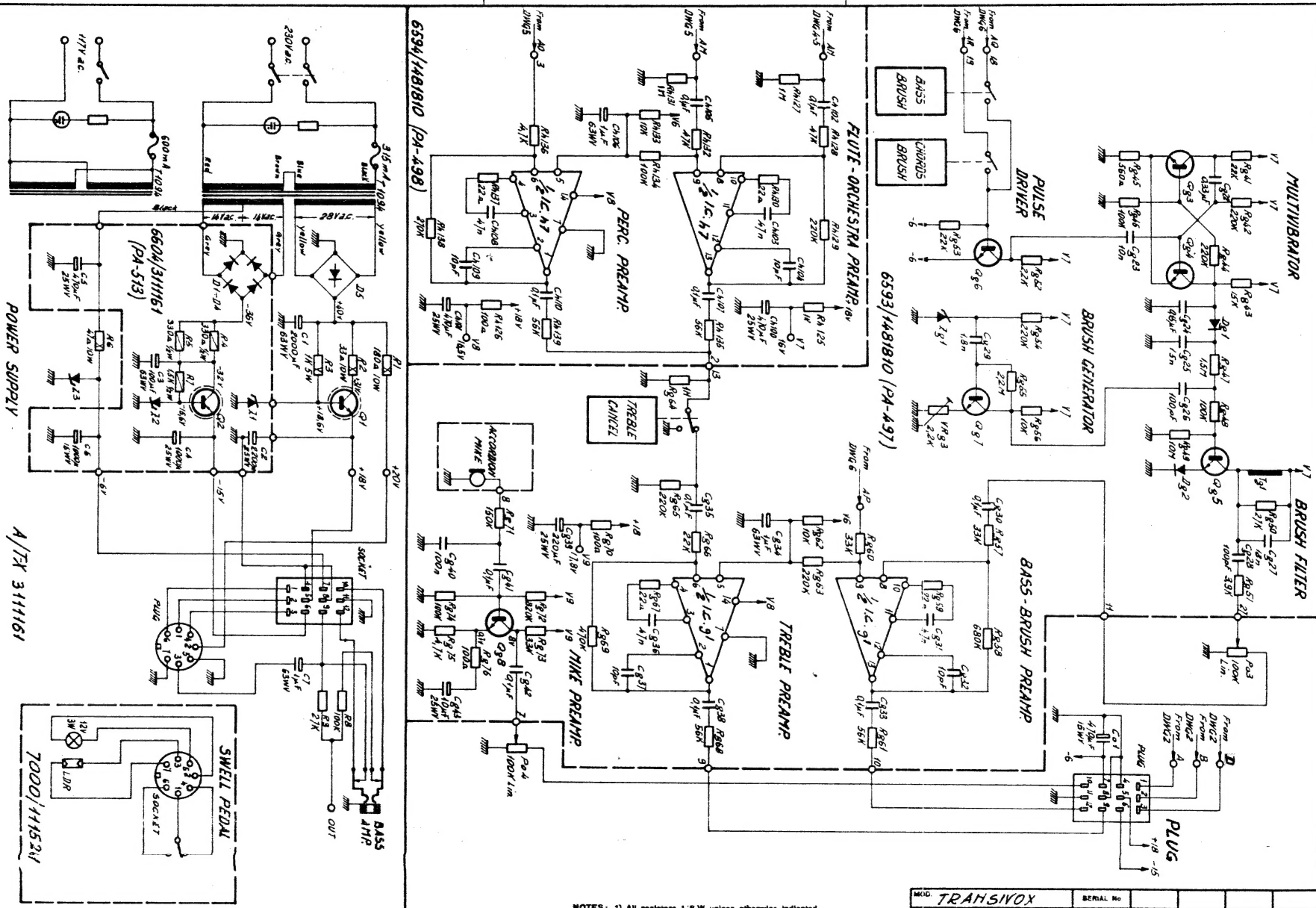
MOD. TRANSVOX		SERIAL No			
	CODE	REVISION			
	SE-195	DATE	19-27		

# FLUITE FILTERS 6594/1481810(PA-498)



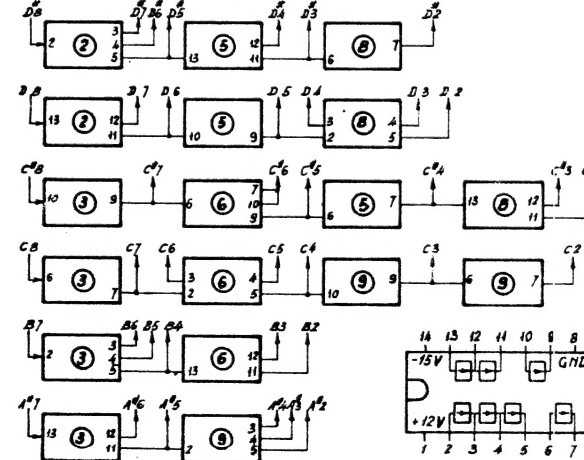
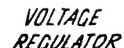
NOTES: 1) All resistors 1/8 W unless otherwise indicated.  
2) All teletwitches shown in OFF position.  
3) All switches shown in OFF position.  
4) See parts list for component part numbers.


MOD. TRANSIVOX		SERIAL No.	
	CODE	DATE	19.2.73
	SE-195		

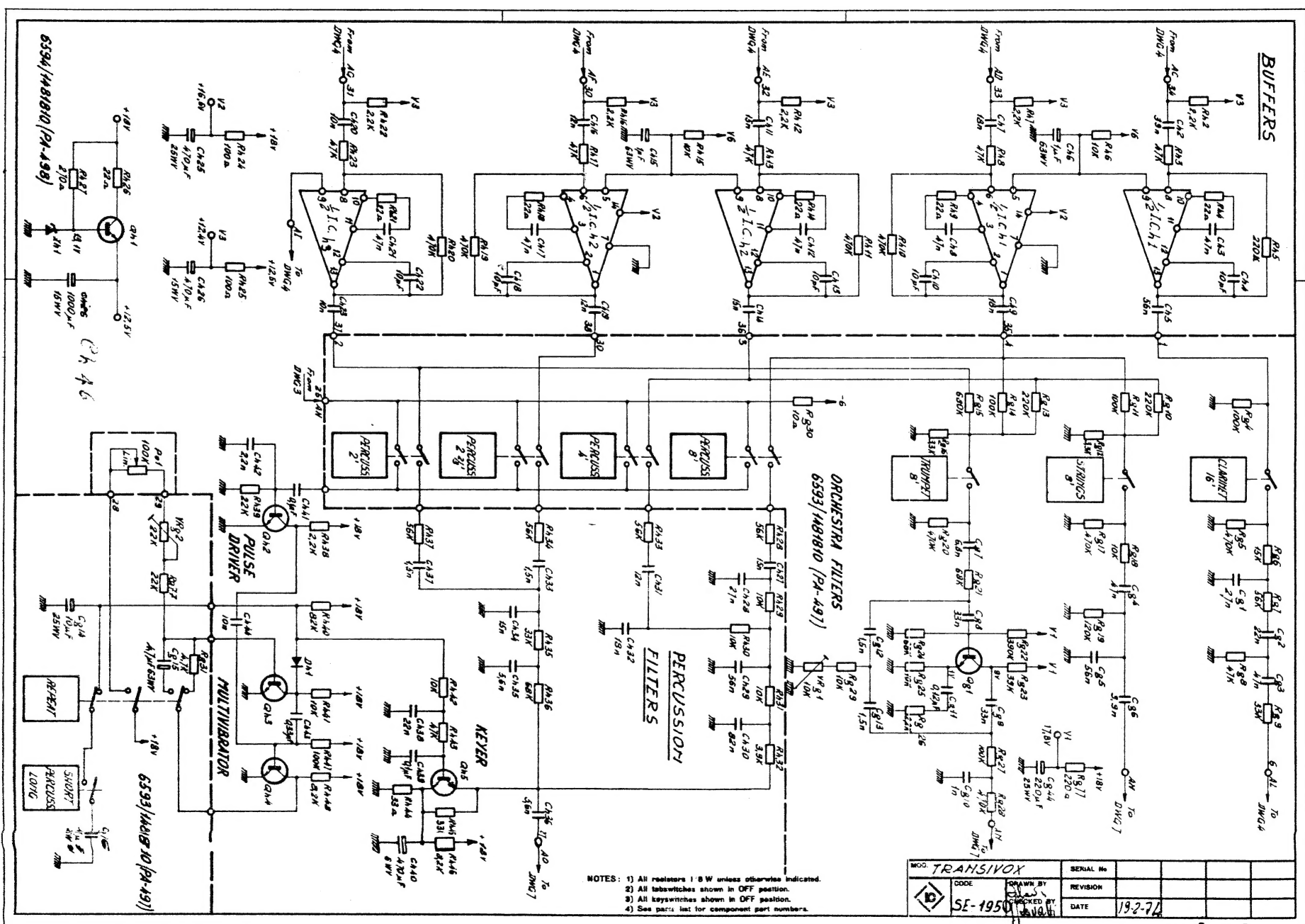


- NOTES: 1) All resistors 1/8 W unless otherwise indicated.  
 2) All teletypes shown in OFF position.  
 3) All keyswitches shown in OFF position.  
 4) See parts list for component part numbers.

MID. TRANSVOX		SERIAL No.	
CODE	DRAWN BY	REVISION	
SE-195	10/10/10	CHECKED BY	
		DATE	19-2-74



MOD. TRANSIVOX	SERIAL No			
	CODE	DRAWN BY		
	SE-1950 CHECKED BY [Signature]	REVISION		
		DATE	19-7-74	






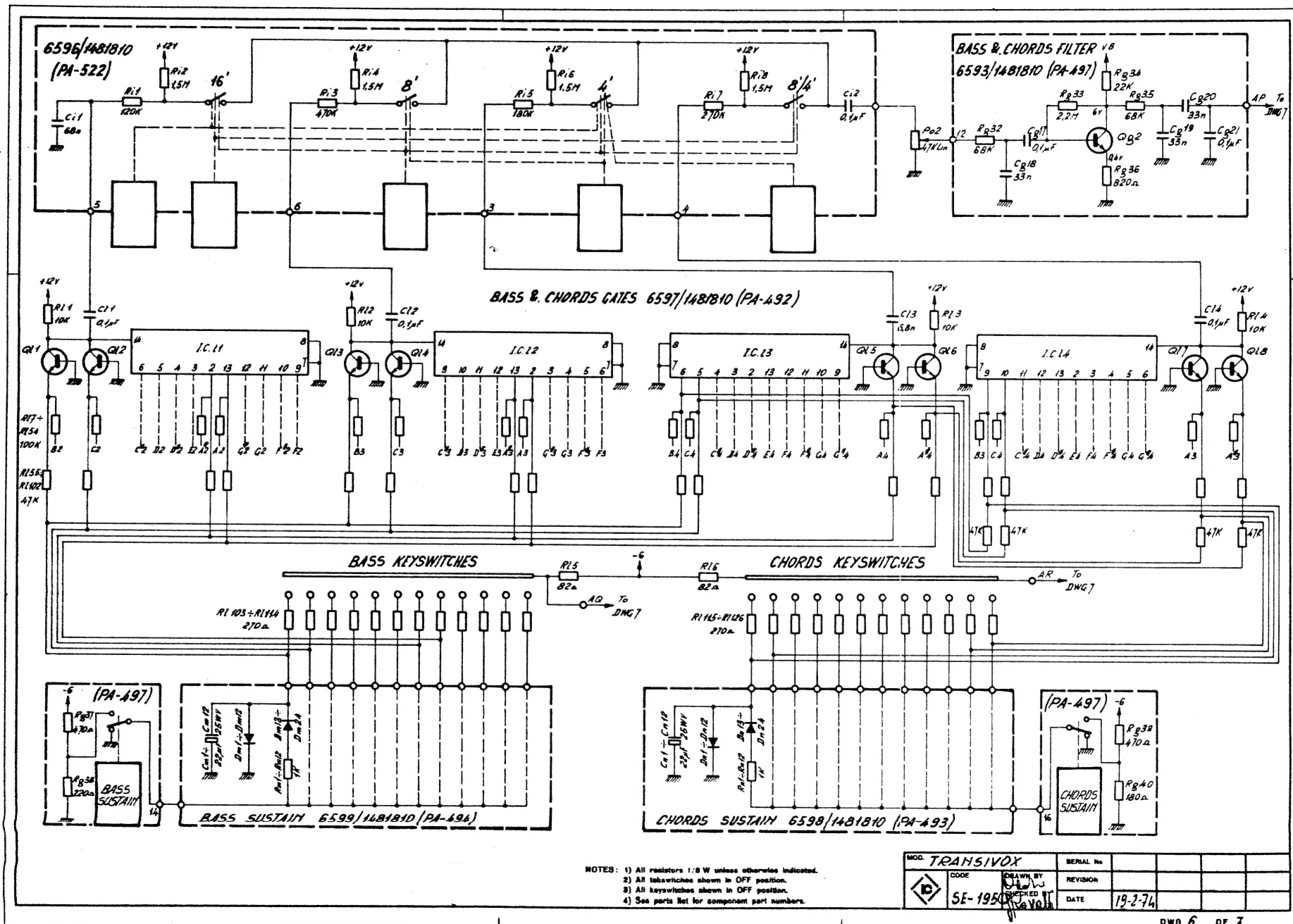
6534/44810 (P4-498)

CH 4 C

6533/44810 (P4-497)

- NOTES: 1) All resistors 1/8 W unless otherwise indicated.  
2) All switches shown in OFF position.  
3) All keyswitches shown in OFF position.  
4) See parts list for component part numbers.

MOG. TRANSIVOX		SERIAL No				
	CODE	DRAWN BY 	REVISION			
	SE-1950	CHECKED BY 	DATE	19-2-72		



Schem.Ref.	Circuit	Type	Part Code
<u>POWER SUPPLY (DWG 7/SE 195)</u>			<u>3111161</u>
Q 1	Series Stabilizer.....	Whestinghouse 156-043... Solitron H 9340.....	W/1800
Z 3	Zener Diode..... (6,8V - 3W)	IR - 3Z 6,8 T5.....	B/1510
D 5	Rectifier Bridge.....	ITT - B 40 C 2200/3200.. SIEMENS B 40 C 2200/3200	B/1201
<u>PA 513 VOLTAGE REGULATOR BOARD (DWG 7/SE 195)</u>			<u>6604/3111161</u>
Q 2	Series Stabilizer.....	BC 287.....	W/1702
Z 2	Voltage Reference-Diode Zener (15V - 400 mW)	ITT ZPD 15..... IR 1N 965 B.....	B/1319
Z 1	Voltage Reference-Diode Zener (18V - 1W)	ITT ZY 18..... IR 1N 4716 A	B/1421
D1 ÷ D4	Rectifier Diodes (Bridge)..	IR 10D1 - 10D6..... ITT 1N 4002 - 1N 4005...	B/1100 B/1101 - B/1102
<u>PA 495 OSCILLATOR-TONE GENERATOR (DWG 2/SE 195)</u>			<u>6590/1481810</u>
I.C. b1	TTL - Oscillator.....	SN 29730.....	W/1009
IC/b2÷IC/b4	Frequencies Sinthetyzer....	SAH - 190.....	W/1104
I.C. b5	D.I.L. Stabilize.....	SN 72723 N.....	W/1209
Qb1 ÷ Qb4	Buffer Transistors.....	BC 209-B..... BC 239 - B.....	W/1407
Z b1	Zener Diode..... (6,2V-1W)	IR 1N 4735 A..... ITT ZPY 6,2.....	B/1410
Db1÷Db5	Diodes.....	SGS IX9809..... BA 130..... ITT 1N 4048.....	B/1000 B/1001 - B/1003



# TRANSIVOX

## TRANSISTORS (Q) & DIODES (D) LIST

2

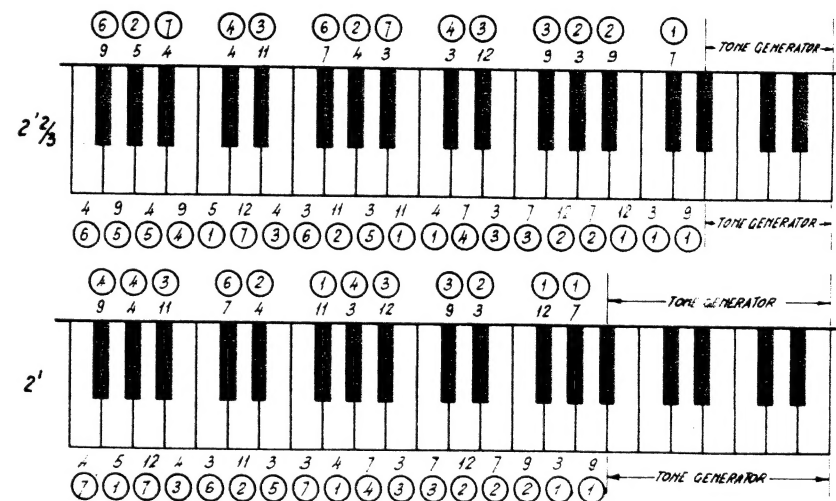
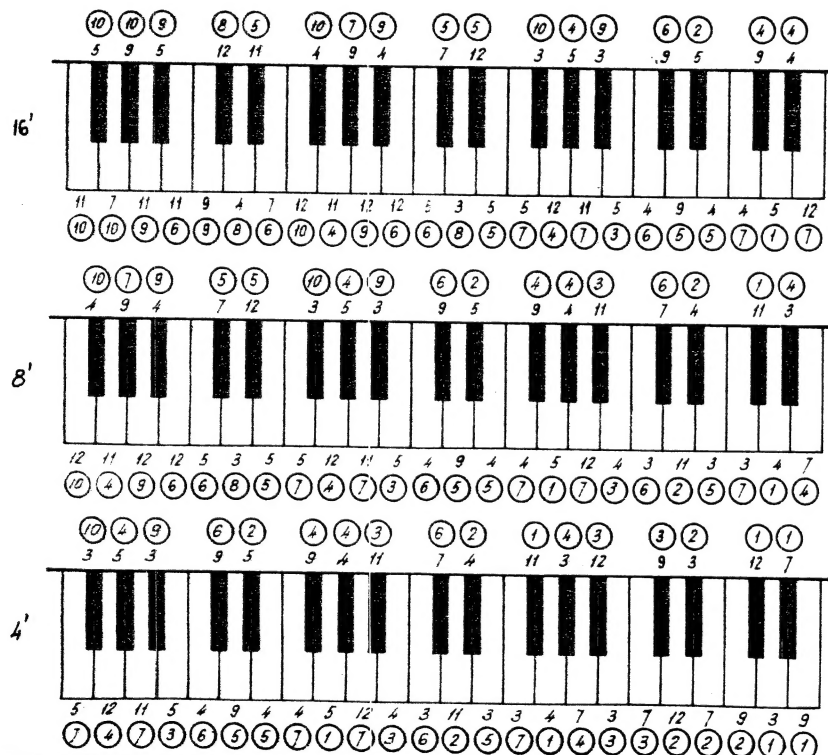
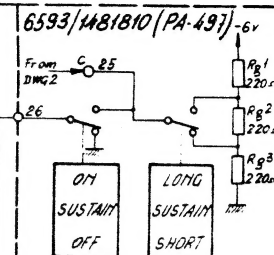
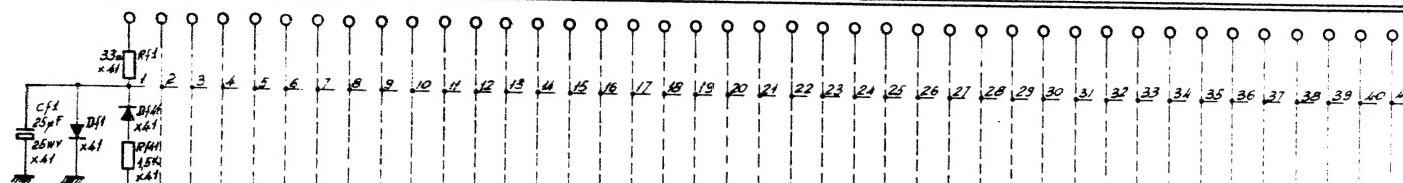
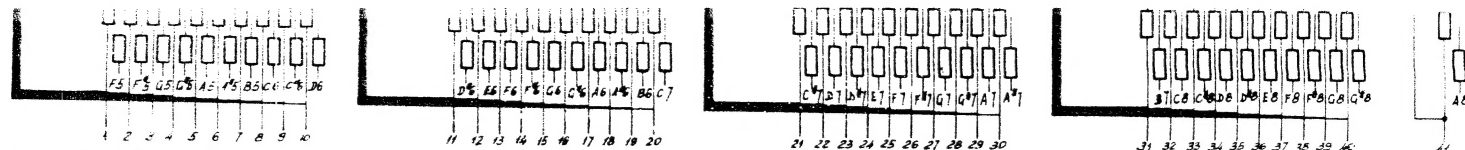
Schem.Ref.	Circuit	Type	Part Code
<u>PA 496</u>	<u>VIBRATO (DWG 2/SE 195)</u>		<u>6589/1481810</u>
Q a 1	Vibrato Oscillator.....	BC 209-B.....	W/1407
Q a 2	Vibrato Buffer.....	BC 239-B.....	
<u>PA 422</u>	<u>TREBLE GATES (DWG 2-3/SE 195)</u>		<u>6586/1481810</u>
IC1÷IC10	Integrated Dividers.....	G.I.E. - MISTRAL.....	W/1100 - W/1101
Qe1-Qe5	Transistor Gate.....	BC 209-B..... BC 239-B.....	W/1407
<u>PA 411</u>	<u>SHAPPER GATE (DWG 3/SE 195)</u>		<u>6587/1481810</u>
IC c1x20	Gate with 10 emitter.....	TBA 470-ITT.....	W/1202
<u>PA 499</u>	<u>TREBLE GATE (DWG 3/SE 195)</u>		<u>6585/1481810</u>
Df1÷Df88	Diodes.....	SGS IX9809..... BA 130.....	B/1000 - B/1001 B/1002 - B/1003
<u>PA 563</u>	<u>TREBLE KEYSWITCHES (DWG 4/SE 195)</u>		<u>6647/1481810</u>
Dd1÷Dd19	Diodes.....	SGS IX9809..... BA 130.....	B/1000 - B/1001 B/1002 - B/1003
<u>PA 498</u>	<u>FLUTE FILTERS (DWG 4-5-7/SE 195)</u>		<u>6594/1481810</u>
IC1-IC2 $\frac{1}{2}$ IC h3	Buffer Integrated circuits	SN 76131.....	W/1201
$\frac{1}{2}$ IC h3 IC4÷IC6	Flute Filter.....		
$\frac{1}{2}$ IC h7	Flute Orchestra preamplifier		
$\frac{1}{2}$ IC h7	Percussion Preamplifier...		

# TRANSIVOX

## TRANSISTORS (Q) & DIODES (D) LIST

3


Schem.Ref.	Circuit	Type	Part Code
Q h1	Stabilizer Transistor.....	BC 286.....	W/1601
Q h2	Pulse Driver.....	BC 209-B.....	W/1407
Qh3-Qh4	Multivibrator Transistors...	BC 239-B.....	
Q h5	Keyer Transistor.....	SGS IX 9809... <i>1.2 12 124</i>	<i>1102</i>
D h1	Diode.....	ITT - 1N 4148... <i>4-2 64</i>	B/1002
Z h1	Zener Diode..... (13V-1W)	ITT ZY 13..... IR 1N 4743-A.....	B/1418
PA 497	ORCHESTRA FILTERS (DWG 5-6-7/SE 195)		6593/1481810
$\frac{1}{2}$ IC g1	Bass Brush preamplifier.....	SN 76131.....	W/1201
$\frac{1}{2}$ IC g1	Treble preamplifier.....		
Q g6	Pulse Driver.....	BC 107 A-B.....	W/1403
Q g1	Trumpet filter.....		
Q g2	Bass Chord preamplifier.....		
Qg3-Qg4	Multivibrator Transistors...	BC 209-B.....	W/1407
Q g5	Brush Filter.....	BC 239-B.....	
Q g7	Brush preamplifier.....		
Q g8	Mike preamplifier.....		
Z g1	Brush Generator - Zener Diode	SGS IZ 9824.....	B/1600
D g1-D g2	Diodes.....	SGS IX 9809..... BA-130.....	B/1000 - B/100
PA 492	BASS CHORDS GATE (DWG 6/SE 195)		6597/1481810
IC11-IC14	Gate with 10 emitter.....	ITT-TBA 470.....	W/1202
Q11-Q18	Gate Transistors.....	BC 209-B..... BC 239-B.....	W/1407
PA 494	BASS SUSTAIN (DWG 6/SE 195)		6599/1481810
Dm1-Dm24	Diodes.....	SGS IX 9809..... BA-130.....	B/1000 - B/100
PA 493	CHORDS SUSTAIN (DWG 6/SE 195)		6598/1481810
Dn1-Dn24	Diodes.....	SGS IX 9809..... BA-130.....	B/1000 - B/100



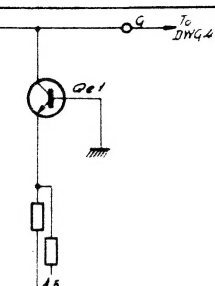
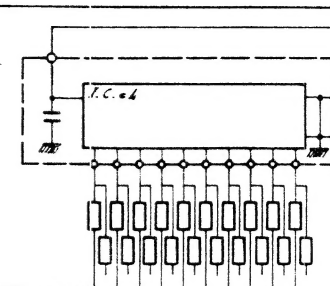
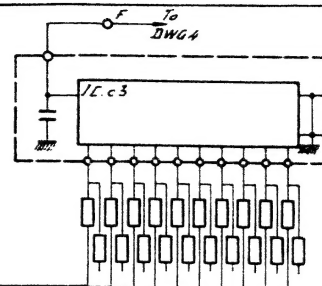
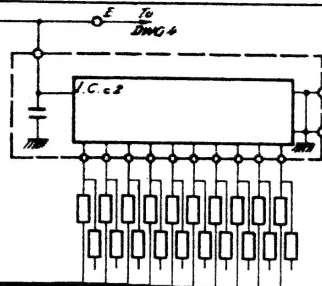
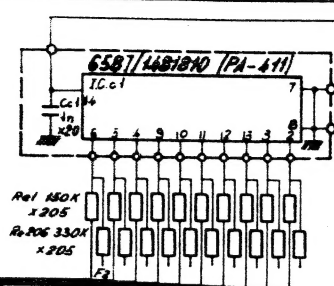
**NOTE:**

The tone generator of the keyboard notes are indicated with two numbers. The circled number that appears also on the printed circuit board PA-422 indicates the integrated circuit. The second number indicates the integrated circuit pin.

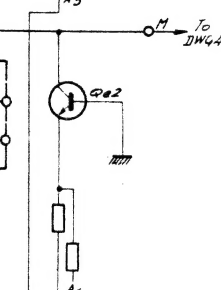
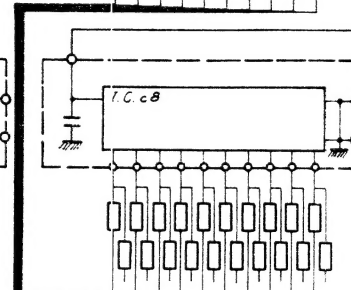
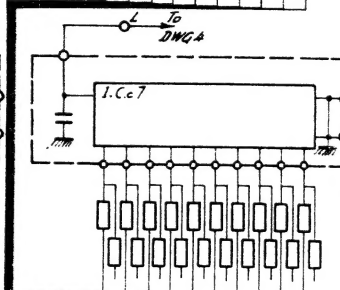
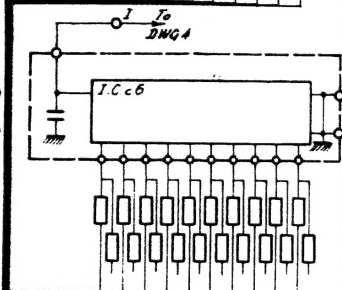
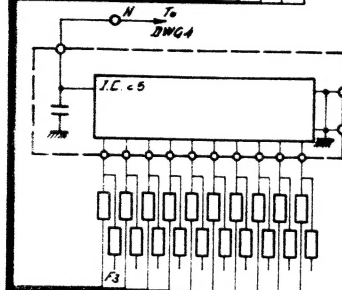
- NOTES: 1) All resistors 1/8 W unless otherwise indicated.  
2) All take-switches shown in OFF position.  
3) All key-switches shown in OFF position.  
4) See parts list for component part numbers.

MOD. <b>TRANSIVOX</b>		SERIAL No				
	CODE	DRAWN BY <i>C. E. H.</i>	REVISION			
	<b>SE-1950</b>	CHECKED BY <i>W. H. H.</i>	DATE	<b>10-2-74</b>		

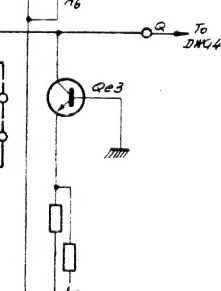
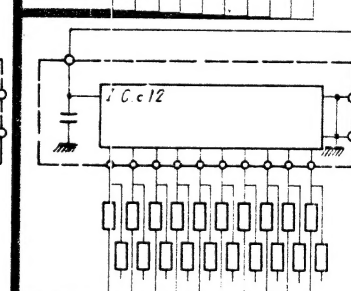
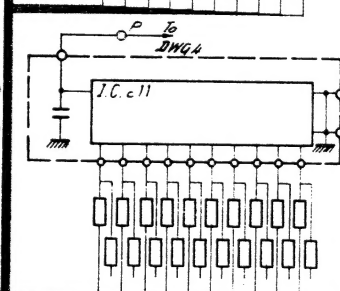
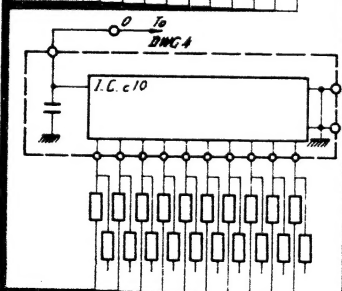
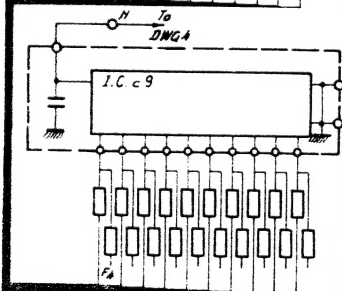
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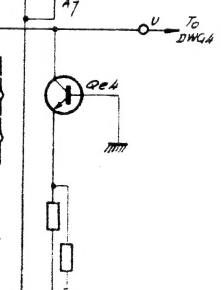
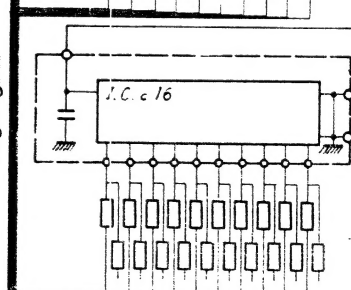
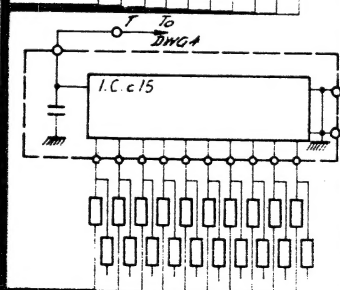
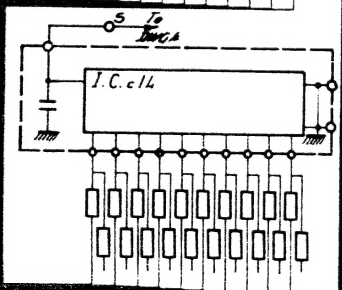
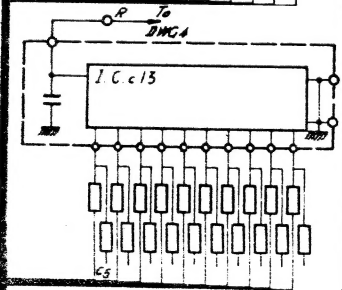
8'



L'



2 2/3'



2'

